

REMARKS/AGRUMENTS

Reconsideration of this application as amended is respectfully requested.

The Examiner has rejected claims 1 and 3 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,519,261 to Brueckheimer, et al. (hereafter "Brueckheimer '261").

The Examiner has rejected claims 2, 4-6, and 11-12 under 35 U.S.C. § 103(a) as being unpatentable over Brueckheimer '261 in view of U.S. Patent No. 6,496,508 to Brueckheimer, et al. (hereafter, Brueckheimer '508).

The Examiner has rejected claims 7-10, and 13-14 under 35 U.S.C. § 103(a) as being unpatentable over Brueckheimer '261 in view of Brueckheimer '508 in further view of U.S. Patent No. 6,490,245 to Burns, et al. (hereafter, Burns).

Claims 2 and 4 have been cancelled without prejudice.

Claims 1, 3, 5, 7, and 9-14 have been amended. It is respectfully submitted that no new matter has been added.

CLAIM OBJECTIONS

The Examiner objected to claims 9, and 12-14. Claims 9, and 12-14 have been amended to provide appropriate correction.

CLAIM REJECTIONS – 35 USC §102 (e)

The Examiner has rejected claims 1 and 3 under 35 U.S.C. §102(e) as being anticipated by Brueckheimer '261. Applicant submits that claims 1-3 are not anticipated by Brueckheimer '261. In regard to the rejection of claims 1 and 3, the Examiner has stated in part that:

Applicant argues that Brueckheimer '261 does not describe any method associated with the actual implementation of his connection control. In response, it is stated that Brueckheimer '261 discloses "a method for typical ATM adaptation of communication traffic," refer to col. 3 line 25, col. 4 lines 1-3, col. 1 lines 5-6;

Further, Bruekheimer '261 discloses, "channel associated signaling, refer to col. 5, line 65 through col. 6, line 9.

(12/24/03, Office Action, p 6)

The sections of Bruekheimer '261 that the Examiner cites above broadly state *methods for adapting traffic in such networks* (Bruekheimer '261, col. 1, ll. 5-6), and a *method of providing interworking between IP, TDM and ATM*. (Bruekheimer '261, col. 4, ll. 1-3) Such methods of Bruekheimer '261 do not disclose a method implementing call control. Thus, applicant respectfully disagrees with the Examiner and maintain that Bruekheimer '261 does not disclose "establishing ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) on a call-by-call basis **using ATM standards-based call control signaling protocols**" as stated by applicant's claim 1.

The Examiner continues, by stating:

Bruekheimer '261 disclose, ""establishing AAL2CIDs, refer to col. 2, lines 36-60, on a call by call basis, refer to "carrying call connection" col. 6 line 6/8-10, using ATM standards-based, refer to col. 1 lines 53-55, col. 10 lines 19-22 and col. 12 lines 12-14, call control signaling protocol," refer to col. 5, line 65- col. 6 line 10 as taught by claim 1.

Applicant respectfully disagrees with the Examiner. The Examiner cites disjointed portions of Bruekheimer '261, that establish at most that *AAL2 protocol uses CIDs with CPS packets* (Bruekheimer '261, col. 2, ll. 36-60); *that common channel signaling (CCS) is used by dedicating a telephony channel for call connection* (Bruekheimer '261, col. 6 line 6/8-10); *that AAL0 can carry call connection signals* (Bruekheimer '261, col. 1 lines 53-55); *that the egress CPS functions perform compressed VP/NCI translations, with reference to packet CID's* (Bruekheimer '261, col. 10, ll. 19-22); and *within the destination egress SSCS device (e.g., device 11 of Fig. 1) an agent transfers SSCS SDU packets* (Bruekheimer '261, col. 12, ll. 12-14). None of these pieces individually or collectively describe "establishing ATM adaptation layer 2 (AAL2) channel identifiers (CIDs) on a call-by-call basis **using ATM standards-based call control signaling protocols of an AAL2 signaling layer** as stated in applicant's claim 1.

Nevertheless, applicant respectfully submits that amended claims 1 and 3, are not anticipated by Brueckheimer '261. Claim 1 recites the feature of "executing a **call set-up process in the AAL2 signaling layer**, comprising **mapping the common CID to a virtual path/virtual channel (VP/VC)** that forms part of a virtual user network interface (UNI) to an ATM network" (Emphasis added) This feature is not disclosed by Brueckheimer '261. Infact, Brueckheimer '261's invention focuses on a specific physical implementation for an AAL2 switch requiring a specific chip suite and the method of interconnecting the chip suite. (Brueckheimer '261, col. 6, ll. 10-14). More specifically, Brueckheimer 261's invention lies within the common part sub-layer (CPS) as defined by I.363.2, and not the Service Specific Convergence Sub-layer (SSCS). This is especially evident from the fact that each Figure of Brueckheimer 261 illustrates CPS packet distribution. Brueckheimer '261 does not discuss call control, but instead briefly mentions connection control. However, he does not describe any method associated with the actual implementation of his connection control. (Brueckheimer '261, col. 8, ll. 39-43). Although, he is concerned with connection control in regard to multiple CPS devices (i.e., device 11 of his Fig. 1) being interconnected into an ALS sub-system. (Brueckheimer '261, col. 8, ll. 33-35) Connection control in Brueckheimer '261 is only required as part of the firmware required to manage the inter chip virtual connection links in terms of load balancing. (Brueckheimer '261, col. 8, ll. 48-56; col. 10, ll. 51-53) The lack of connection control in Brueckheimer '261 is further proof that the device 11, performs at the CPS and therefore does not describe any **call set-up process in the AAL2 signaling layer, that maps the common CID to a VP/VC**. Because, Brueckheimer '261 does not disclose "executing a **call set-up process in the AAL2 signaling layer**, comprising **mapping the common CID to a virtual path/virtual channel (VP/VC)** that forms part of a virtual user network interface (UNI) to an ATM network" as taught by claim 1, applicant respectfully submits that claim 1 is not anticipated under 35 U.S.C. § 102(e) by Brueckheimer '261.

The Examiner also rejected claim 3 under 35 U.S.C. §102(e) for the reasons set forth in the rejection of claim 1. Claim 3 discloses substantially similar limitations as claim 1 and recites a node configured to ... execute a **call set-up process in the AAL2 signaling layer**, comprising **mapping the common CID to a virtual path/virtual channel (VP/VC)** that forms part of a virtual user network interface (UNI) to an ATM network. (emphasis added). Because Brueckheimer '261 does not disclose this feature as taught by claim 3, applicant respectfully submits that claim 3 is not anticipated under 35 U.S.C. §102(e) by Brueckheimer '261.

CLAIM REJECTIONS – 35 USC §103 (a)

The Examiner has rejected claims 2, 4-6, and 11-12 under 35 U.S.C. §103(a) as being unpatentable over Brueckheimer '261 in view of Brueckheimer '508. In regard to the rejection of claim 2 under 35 U.S.C. §103(a), the Examiner has stated in part that:

Brueckheimer '261 discloses the method of claim 1 further comprising translations (mapping) the CIDs to a local channel ID (virtual path/ virtual channel (VP/VC)), refer to col. 10, lines 19-21....

(12/24/03 Office Action, p. 3).

Applicant respectfully disagrees. Applicant submits the pending claims are not obvious in view of Brueckheimer '261 and Brueckheimer '508. It is respectfully submitted that it would be impermissible hindsight, based on applicant's own disclosure, to combine Brueckheimer '261 and Brueckheimer '508.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

However, nowhere is there any indication that the references provide any motivation for the recited combination. Instead, it appears the teachings of the present application have been used as a blueprint to gather together and assemble various components of the prior art in the

manner contemplated by applicant. This is a classic example of the use of hindsight reconstruction, and cannot properly be used as grounds for rejecting the present claims.

The U.S. Court of Appeals for the Federal Circuit has strongly criticized such applications of hindsight by specifically indicating that when an obviousness determination is made based upon a combination of references, even a patent examiner "must show reasons that the skilled artisan, confronted with the same problems as the inventor *and with no knowledge of the claimed invention*, would select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (Emphasis added). Merely indicating, as the Examiner argues in his Office Action of May 6, 2003, that the claimed invention would be obvious to one of ordinary skill in the art based on the combination of the references is utterly inadequate. *Rouffet*, at 1357. Instead, what is needed is a showing of motivation, either from the references themselves or the knowledge of those of ordinary skill in the art, for the combination being relied upon. *Rouffet*, at 1357.

In the present case, there has been no showing of such motivation. Instead, the Examiner attempts to deconstruct the subject matter of the claims of the present application into its constituent components, states where each such component may be found in one of the cited references, and then concludes that it would have been obvious to combine the references to arrive at the claimed invention. This bare bones analysis is not sufficient to support a determination of obviousness of the present application. The burden is on the Examiner to show *why* one is so motivated as to come up with the combination being relied upon. *Rouffet*, at 1357-1358 ("If such a rote invocation could suffice to supply a motivation to combine, the more sophisticated scientific fields would rarely, if ever, experience a patentable technical advance. Instead, in complex scientific fields [an infringer or the Patent Office] could routinely identify the prior art elements in an application, invoke the lofty level of skill, and rest its case for [obviousness]. To counter this potential weakness in the obviousness construct, the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote

application of the legal test for obviousness.") Claims 2 and 4 have been cancelled without prejudice.

In regard to the rejection of claims 5-6 under 35 U.S.C. §103(a) for the reasons set forth in the rejection of claim 2, even if Brueckheimer '261 and Brueckheimer '508 were combined, such a combination would lack one or more features of claim 5. Claim 5 recites the feature of "executing **a call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network." (Emphasis added) This feature is not disclosed by Brueckheimer '261. Infact, Brueckheimer '261's invention focuses on a specific physical implementation for an AAL2 switch requiring a specific chip suite and the method of interconnecting the chip suite. (Brueckheimer '261, col. 6, ll. 10-14). More specifically, Brueckheimer 261's invention lies within Layer 1 and Layer 2 of the 7 layer protocol stack. Thus, Brueckheimer '261 does not discuss call control, as claimed by applicant in claim 1. Although Brueckheimer '261 mentions connection control, he does not describe any method associated with the actual implementation of his connection control. (Brueckheimer '261, col. 8, ll. 39-43). Connection control in Brueckheimer '261 is only required as part of the firmware required to manage the inter chip virtual connection links. Nowhere does Brueckheimer '261 describe establishing AAL2 CIDs on a call-by-call basis using ATM standards-based call control signaling protocols as claimed by applicant's claim 1.

Nor does Brueckheimer '508 disclose "executing **a call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network" as claimed by applicant. Brueckheimer '508 describes the elimination of signaling demanded by UNI in the connection establishment procedure between narrowband and broadband networks.

(Brueckheimer "508, col. 4, ll. 11-13). More specifically, Brueckheimer '508 describes the use of pre-provisioned connection identifiers, controlled by a connection broker. (Brueckheimer '508, col. 4, l. 21-col. 5, l. 48). Nowhere does Brueckheimer '508 even discuss AAL2 CIDs.

Consequently, Brueckheimer '508 does not teach executing **a call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network, as claimed by the applicant.

Thus, because neither, Brueckheimer '261 nor Brueckheimer '508 disclose applicant's claim 5, applicant respectfully submits that claim 5 is not obvious under 35 U.S.C. §103(a) by Brueckheimer '261 in view of Brueckheimer '508. Given that claims 6-10 depend from claim 5, applicant respectfully submits that claims 5-10 are not obvious under 35 U.S.C. §103(a) by Brueckheimer '261, in view of Brueckheimer '508.

The Examiner also rejected claim 11 under 35 U.S.C. §103(a) for the reasons set forth in the rejection of claim 2. Claim 11 discloses substantially similar limitations as claim 1 and recites computer-readable instructions...to execute **a call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network. Because Brueckheimer '261, in view of Brueckheimer '508, does not disclose this feature and given that claims 12-14 depend from claim 11, applicant respectfully submits that claims 11-14 are not obvious under 35 U.S.C. §103(a) by Brueckheimer '261, in view of Brueckheimer '508.

The Examiner has rejected claims 7-10, and 13-14 under 35 U.S.C. §103(a) as being unpatentable over Brueckheimer '261 in view of Brueckheimer '508 in further view of Burns. In regard to the rejection of claim 2 under 35 U.S.C. §103(a), the Examiner has stated in part that:

Brueckheimer '261 and '508 discloses all the subject matter of the claimed invention with the exception of "network edge device communicatively coupled to customer premise equipment"

(5/6/03 Office Action, p. 5).

Applicant respectfully disagrees. Applicant submits that claims 7-10, and 13-14 are not obvious in view of Brueckheimer '261, Brueckheimer '508 and Burns. It is respectfully submitted that it would be impermissible hindsight, based on applicant's own disclosure, to combine Brueckheimer '261, Brueckheimer '508, and Burns.

In regard to the rejection of claims 7-10, even if Brueckheimer '261 and Brueckheimer '508 were combined, such a combination would lack one or more features of claim 5 from which claims 7-10 depend. Claim 5 recites the feature of "executing a **call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network" (Emphasis added) This feature is not disclosed by Brueckheimer '261. Infact, Brueckheimer '261's invention focuses on a specific physical implementation for an AAL2 switch requiring a specific chip suite and the method of interconnecting the chip suite. (Brueckheimer '261, col. 6, ll. 10-14). More specifically, Brueckheimer 261's invention lies within Layer 1 and Layer 2 of the 7 layer protocol stack. Thus, Brueckheimer '261 does not discuss call control, as claimed by applicant in claim 5. Although Brueckheimer '261 mentions connection control, he does not describe any method associated with the actual implementation of his connection control. (Brueckheimer '261, col. 8, ll. 39-43). Connection control in Brueckheimer '261 is only required as part of the firmware required to manage the inter chip virtual connection links. Nowhere does Brueckheimer '261 describe executing a **call set-up process in an AAL2 signaling layer**,

comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network as claimed by applicant's claim 5.

Nor does Brueckheimer '508 disclose "executing a **call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network" as claimed by applicant. Brueckheimer '508 describes the elimination of signaling demanded by UNI in the connection establishment procedure between narrowband and broadband networks. (Brueckheimer "508, col. 4, ll. 11-13). More specifically, Brueckheimer '508 describes the use of pre-provisioned connection identifiers, controlled by a connection broker. (Brueckheimer '508, col. 4, l. 21-col. 5, l. 48). Nowhere does Brueckheimer '508 even discuss AAL2 CIDs. Consequently, Brueckheimer '508 does not teach executing a **call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network as claimed by the applicant.

Nor does Burns disclose "executing a **call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network" as claimed by applicant. Burns describes recovering from a signalling failure in a switched connection data transmission network. (Burns, title). More specifically, Burns describes a method shown in his Figure 3 for re-constructing connections after failure. (Burns, Fig. 3). Nowhere does Burns discuss mapping AAL2 CIDs. Consequently, Brueckheimer '508 does not teach executing a **call set-up process**

in an AAL2 signaling layer, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network.

Thus, because neither, Brueckheimer '261 nor Brueckheimer '508 nor Burns disclose applicant's claim 5, applicant respectfully submits that claim 5 is not obvious under 35 U.S.C. §103(a) by Brueckheimer '261 in view of Brueckheimer '508 and further in view of Burns. Given that claims 6-10 depend from claim 5, applicant respectfully submits that claims 5-10 are not obvious under 35 U.S.C. §103(a).

The Examiner also rejected claims 13-14 under 35 U.S.C. §103(a) for the reasons set forth in the rejection of claims 7-10. Claim 11 from which claims 13-14 depend, discloses substantially similar limitations as claim 5 and recites computer-readable instructions...to execute **a call set-up process in an AAL2 signaling layer**, comprising mapping the common CID to a virtual path/virtual channel (VP/VC) as part of a standards-based **ATM call control protocol of the AAL2 signaling layer**, wherein the VP/VC forms part of a virtual user network interface (UNI) to an ATM network. Because Brueckheimer '261, in view of Brueckheimer '508, and further in view of Burns does not disclose this feature and given that claims 12-14 depend from claim 11, applicant respectfully submits that claims 11-14 are not obvious under 35 U.S.C. §103(a) by Brueckheimer '261, in view of Brueckheimer '508, and further in view of Burns.

Accordingly, Applicant respectfully submits that the Examiners objections, and rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) have been overcome by the amendments and the remarks and withdrawal of these objections and rejections is respectfully requested. Applicant submits that the pending claims are now in condition for allowance and such action is earnestly solicited.

If there are any additional charges, please charge them to our Deposit Account No. 02-



Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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